What is claimed is:

1. A credit card transaction authentication system using a mobile terminal for performing a work of credit card authentication for a relay system of a VAN company connected between an approval system of a credit card company, which can approve a credit card settlement of the prices, and a transaction approval terminal, which requests credit card transaction approval by means of contactless radio-frequency identification of said mobile terminal containing a transponder therein, comprising:

a process server connected with said relay system of said VAN company through a network, for operating a site, which provides an environment capable of performing registration and modification of credit card information for a credit card settlement function by means of said contactless radio-frequency identification of said mobile terminal, and for controlling said credit card transaction authentication system to perform said work of credit card authentication for said relay system of said VAN company;

an authentication engine which in accordance with control of said process server, upon receipt of credit card authentication request data on said mobile terminal from said relay system of said VAN company that has received price settlement request data generated from said transaction approval terminal by means of said contactless radio-frequency identification of said mobile terminal, extracts credit card connection information on said mobile terminal, based on said received authentication request data and transmits authentication data to said relay system of said VAN company; and

a database server for storing information on a user of said mobile terminal, said credit card connection information resulted from said contactless radio-frequency identification of said mobile terminal, and information on a

peculiar code of said transponder contained in said mobile terminal, according to said control of said process server.

2. The credit card transaction authentication system using the mobile terminal as claimed in Claim 1, wherein said process server includes:

a communication portion which allows said process server to be connected with said relay system of said VAN company through said network, and receives and transmits data on registration, change, and authentication of a credit card so that said credit card settlement can be made by means of said contactless radio-frequency identification of said mobile terminal;

a mobile or web site for providing an environment in which member registration of said user of said mobile terminal, and registration, change and environment configuration of said credit card information for said mobile terminal are provided; and

a control portion for controlling operations of said credit card transaction authentication system and for controlling a series of functions for said relay system of said VAN company to perform said work of credit card authentication so that said credit card settlement can be made by means of said contactless radio-frequency identification of said mobile terminal.

3. The credit card transaction authentication system using the mobile terminal as claimed in Claim 1, wherein said authentication engine includes:

a registration portion which receives user's information including personal data on said user of said mobile terminal, through said network, receives said peculiar code and an encryption key of said transponder contained in said mobile terminal, and said credit card connection information including a credit card number and the term of validity of said credit card owned by said user of said

mobile terminal, and then registers them at said database server;

an extraction portion which receives said credit card authentication request data on said mobile terminal from said relay system of said VAN company which has received said price settlement request data generated from said transaction approval terminal by means of said contactless radio-frequency identification of said mobile terminal and then extracts said credit card connection information for said mobile terminal based on said received authentication request data; and

an authentication portion which transmits said authentication data including said credit card number to said relay system of said VAN company based on said credit card connection information extracted by said extraction portion.

4. The credit card transaction authentication system using the mobile terminal as claimed in Claim 1, wherein said database server includes:

a member database which stores member's information including an ID, a password, and basic personal data received when said user of said mobile terminal requests a subscription to a member, and said credit card connection information including said credit card number and said term of validity of said credit card owned by said user of said mobile terminal;

a security database which stores information on said peculiar code and said encryption key of said transponder contained in said mobile terminal; and

a management database which stores history information on the transmission of said authentication data from said relay system of said VAN company based on said credit card authentication request data, and user's environment configuration information for said credit card authentication request from said mobile terminal.

5. The credit card transaction authentication system using the mobile terminal as claimed in Claim 1, wherein a POS server is further provided between said transaction approval terminal and said relay system of said VAN company, and said credit card transaction authentication system performs said work of credit card authentication for said POS server.

6. A credit card transaction authentication system using a mobile terminal, comprising:

a process server connected, through a network, with an approval system of a credit card company, which can approve a credit card settlement of the prices, and with a transaction approval terminal, which requests credit card transaction approval by means of contactless radio-frequency identification of a mobile terminal containing a transponder therein, for performing control to provide a work of credit card authentication in response to said credit card settlement of the prices by said contactless radio-frequency identification carried out between said mobile terminal and said transaction approval terminal,

an authentication engine which in accordance with said control of said process server, upon receipt of price settlement request data generated from said transaction approval terminal by means of said contactless radio-frequency identification of said mobile terminal, extracts credit card connection information set in said mobile terminal, based on said received price settlement request data, transmits transaction approval request data to an approval system of a credit card company corresponding to said extracted credit card connection information, and, upon return of a transaction approval data for said transaction approval request data, transmits transaction approval result data to said transaction approval terminal; and

a database server for storing information on a user of said mobile

terminal, member store's information for said transaction approval terminal, said credit card connection information resulted from said contactless radio-frequency identification of said mobile terminal, information on a peculiar code of said transponder contained in said mobile terminal, and the like, according to said control of said process server.

7. The credit card transaction authentication system using the mobile terminal as claimed in Claim 6, wherein said process server includes:

a communication portion which allows said credit card transaction authentication system to be connected with said transaction approval terminal and said approval system of said credit card company through said network, and receives and transmits data on registration, change, authentication, approval request of a credit card so that said credit card settlement can be made by means of said contactless radio-frequency identification of said mobile terminal;

a mobile or web site for providing an environment in which member registration of said user of said mobile terminal, and registration, change and environment configuration of credit card information for said mobile terminal are provided; and

a control portion for controlling operations of said credit card transaction authentication system and for controlling said work of credit card authentication and a series of functions for obtaining said transaction approval so that said credit card settlement can be made by means of said contactless radio-frequency identification of said mobile terminal.

8. The credit card transaction authentication system using the mobile terminal as claimed in Claim 6, wherein said authentication engine includes:

a registration portion which receives user's information including

personal data on said user of said mobile terminal, through said network, also receives said peculiar code and an encryption key of said transponder contained in said mobile terminal, and said credit card connection information including a credit card number and the term of validity of said credit card owned by said user of said mobile terminal, and then registers them at said database server;

an extraction portion which receives said price settlement data generated from said transaction approval terminal by means of said contactless radio-frequency identification of said mobile terminal and then extracts said credit card connection information for said mobile terminal based on said received price settlement data; and

an authentication portion which transmits said transaction approval request data to said approval system of said pertinent credit card company based on said credit card connection information extracted by said extraction portion, and, upon return of said transaction approval data for said transaction approval request data, transmits said transaction approval result data to said transaction approval terminal.

9. The credit card transaction authentication system using the mobile terminal as claimed in Claim 6, wherein said database server includes:

a member database which stores member's information including an ID, a password, and basic personal data received when said user of said mobile terminal requests a subscription to a member, said credit card connection information including said credit card number and said term of validity of said credit card owned by said user of said mobile terminal, and member store's information for said transaction approval terminal;

a security database which stores information on said peculiar code, said encryption key of said transponder contained in said mobile terminal, and a

peculiar code of said transaction approval terminal; and

a management database which stores history information on said credit card authentication or said transaction approval data related to said price settlement request data from said transaction approval terminal, and user's environment configuration information on said credit card authentication for said mobile terminal.

10. A credit card transaction authentication method using a mobile terminal, performed by a credit card transaction authentication system toward a relay system of a VAN company connected between a transaction approval terminal, which requests a credit card settlement for the prices by means of contactless radio-frequency identification of said mobile terminal containing a transponder therein, and a credit card company, which can approve said credit card settlement of the prices, comprising:

a registration step of receiving and registering credit card connection information including a credit card number and the term of validity of a credit card in correspondence with a peculiar code of said transponder contained in said mobile terminal;

a receipt step of receiving credit card authentication request data including said peculiar code of said transponder contained in said mobile terminal from said relay system of said VAN company which has received data on said credit card settlement for the prices generated by means of said contactless radio-frequency identification performed between said mobile terminal and said transaction approval terminal;

an extraction step of recognizing said peculiar code of said transponder in said received authentication request data, and extracting said credit card connection information such as said credit card number and said term of validity

corresponding to said recognized peculiar code of said transponder; and

a transmission step of, upon extraction of said credit card connection information, generating authentication data such as said credit card number and said term of validity corresponding to said credit card connection information, and transmitting said generated authentication data to said relay system of said VAN company.

11. A credit card transaction authentication method using a mobile terminal, performed by a credit card transaction authentication system between a transaction approval terminal, which requests a credit card settlement for the prices by means of contactless radio-frequency identification of said mobile terminal containing a transponder therein, and an approval system of a credit card company, which can approve said credit card settlement of the prices, to make said credit card settlement of the prices by means of said contactless radio-frequency identification between said mobile terminal and said transaction approval terminal, comprising:

a registration step of receiving and registering credit card connection information including a credit card number and the term of validity of a credit card in correspondence with a peculiar code of said transponder contained in said mobile terminal;

a receipt step of receiving price settlement request data including said peculiar code of said transponder contained in said mobile terminal generated from said transaction approval terminal by means of said contactless radio-frequency identification of said mobile terminal;

an extraction step of recognizing said peculiar code of said transponder in said received price settlement request data, and extracting said credit card connection information such as said credit card number and said term of validity

corresponding to said recognized peculiar code of said transponder;

a transaction approval request step of, upon extraction of said credit card connection information, generating transaction approval request data including said credit card number, and transmitting said generated transaction approval request data to said approval system of said credit card company corresponding to said credit card connection information; and

a credit card authentication/approval step of, upon return of approval data for said transaction approval request data from said approval system of said credit card company, transmitting transaction approval result data to said transaction approval terminal.

12. The credit card transaction authentication method using the mobile terminal as claimed in Claim 10, wherein said transponder contained in said mobile terminal is further provided with an encryption key, said registration step further includes a step of registering said encryption key of said transponder in correspondence with said peculiar code of said transponder contained in said mobile terminal, and said extraction step further includes a step of extracting said encryption key of said transponder corresponding to said recognized peculiar code of said transponder.

13. The credit card transaction authentication method using the mobile terminal as claimed in Claim 11, wherein said transponder contained in said mobile terminal is further provided with an encryption key, said registration step further includes a step of registering said encryption key of said transponder in correspondence with said peculiar code of said transponder contained in said mobile terminal, and said extraction step further includes a step of extracting said encryption key of said transponder corresponding to said recognized peculiar code

of said transponder.

14. The credit card transaction authentication method using the mobile terminal as claimed in Claim 12, wherein said registration step further includes:

a subscription step of receiving basic personal data, information on said mobile terminal containing said transponder, and said credit card connection information such as said credit card number and said term of validity of said credit card of a user inputted when said user of said mobile terminal subscribes to a member;

a confirmation step of confirming, by said approval system of said credit card company, whether said user is a true owner of said credit card and said credit card is available, based on said personal data such as a resident registration number, and said credit card connection information such as said credit card number; and

a registration step of, when it has been determined by said approval system of said credit card company that said user is the true owner of said credit card and said credit card is available, registering said credit card connection information such as said credit card number and said term of validity of the credit card, and said encryption key of said transponder in correspondence with said peculiar code of said transponder.

15. The credit card transaction authentication method using the mobile terminal as claimed in Claim 13, wherein said registration step further includes:

a subscription step of receiving basic personal data, information on said mobile terminal containing said transponder, and said credit card connection information such as said credit card number and said term of validity of said credit card of a user inputted when said user of said mobile terminal subscribes to a

member;

a confirmation step of confirming, by said approval system of said credit card company, whether said user is a true owner of said credit card and said credit card is available, based on said personal data such as a resident registration number, and said credit card connection information such as said credit card number; and

a registration step of, when it has been determined by said approval system of said credit card company that said user is the true owner of said credit card and said credit card is available, registering said credit card connection information such as said credit card number and said term of validity of the credit card, and said encryption key of said transponder in correspondence with said peculiar code of said transponder.

16. The credit card transaction authentication method using the mobile terminal as claimed in Claim 12, wherein said receipt step further includes:

a transaction step of generating a response code by combining said encryption key of said transponder contained in said mobile terminal and a rolling code produced by said transaction approval terminal;

a credit card price settlement request step of transmitting said price settlement request data, which consists of authentication request data including said peculiar code, said encryption key, said rolling code and said response code and of transaction-related data including the prices for goods and member store code, from said transaction approval terminal to said relay system of said VAN company; and

a step of receiving said authentication request data from said relay system of said VAN company.

17. The credit card transaction authentication method using the mobile terminal as claimed in Claim 13, wherein said receipt step further includes:

a transaction step of generating a response code by combining said encryption key of said transponder contained in said mobile terminal and a rolling code produced by said transaction approval terminal; and

a step of receiving said price settlement request data, which consists of authentication request data including said peculiar code, said encryption key, said rolling code, and said response code and of transaction-related data including the prices for goods and member store code, from said transaction approval terminal.

18. The credit card transaction authentication method using the mobile terminal as claimed in Claim 12, wherein said extraction step further includes:

a first step of extracting said stored encryption key from said database server by using said received peculiar code and comparing said extracted encryption key with said received encryption key;

a second step of, when said extracted encryption key conforms to said received encryption key, calculating a response code by combining said stored encryption key and said received rolling code; and

a third step of, when said calculated response code conforms to said received response code, extracting said credit card connection information including said credit card number and said term of validity corresponding to said received peculiar code of said transponder.

19. The credit card transaction authentication method using the mobile terminal as claimed in Claim 13, wherein said extraction step further includes:

a first step of extracting said stored encryption key from said database server by using said received peculiar code and comparing said extracted

encryption key with said received encryption key;

a second step of, when said extracted encryption key conforms to said received encryption key, calculating a response code by combining said stored encryption key and said received rolling code; and

a third step of, when said calculated response code conforms to said received response code, extracting said credit card connection information including said credit card number and said term of validity corresponding to said received peculiar code of said transponder.

20. The credit card transaction authentication method using the mobile terminal as claimed in Claim 10, further comprising:

a member authentication step of, when a user of said mobile terminal connects with a web or mobile site of said authentication system through a network, confirming whether said user is a member;

a member's initial-screen displaying step of, when it has been determined from said member authentication step that said user is a member, providing environment configuration for setting whether said credit card settlement by said mobile terminal is used, registration, change and deletion of a credit card for settlement, and a locking function for a work of credit card authentication; and

an update step of changing and updating said environment configuration for setting whether said credit card selected by said user is continuously used, registration, change, and deletion of said credit card for settlement, and said locking function for said work of credit card authentication.

21. The credit card transaction authentication method using the mobile terminal as claimed in Claim 11, further comprising:

a member authentication step of, when a user of said mobile terminal

connects with a web or mobile site of said authentication system through a network, confirming whether said user is a member;

a member's initial-screen displaying step of, when it has been determined from said member authentication step that said user is a member, providing environment configuration for setting whether said credit card settlement by said mobile terminal is used, registration, change and deletion of a credit card for settlement, and a locking function for a work of credit card authentication; and

an update step of changing and updating said environment configuration for setting whether said credit card selected by said user is continuously used, registration, change, and deletion of said credit card for settlement, and said locking function for said work of credit card authentication.

22. The credit card transaction authentication method using the mobile terminal as claimed in Claim 10, wherein a POS server is further provided between said transaction approval terminal and said relay system of said VAN company, and said credit card transaction authentication system performs a work of credit card authentication for said POS server.